The Birth, Evolution, and Future of Human Consciousness and
Their Implications in Human-Earth Relationship

David E. Macek

ENV 645 The New Science and its Cultural Implications

April 18, 2013

## Abstract

This paper explores the birth, evolution, and future human consciousness and how humans have interacted with the environment over the course of their existence. In the birth of human consciousness, it explores the awareness of death as another critical factor in human development. In the evolution of human consciousness, three periods of development are explored: domestication and agriculture, empires and industry, and the accelerated technology of today. In the future of human consciousness, the paper advocates for a shift in consciousness towards interdependence and social justice to achieve a healthier human-earth relationship.

Keywords: Human Consciousness, Human Evolution, Death and Dying,

The Birth, Evolution, and Future of Human Consciousness and
Their Implications in Human-Earth Relationship

The human species have altered the face of earth more than any other organism that has existed. From enormous cities to massive mining pits, modern society has transformed the land with little regard for the earth's well-being. Depending on one's perspective, the cause may be pinpointed to the founding of agriculture, western civilization, industrialism, or capitalism. This incongruity results from the facts that each of these events has been preceded by another evolutionary development tracing all the way back to the birth of human consciousness and, consequently, humans' awareness of death – a universal event unlike any other in the 13.77 billion-year history of the cosmos. An event that "would in time explode with unexpectedly significant new power, a power of consciousness whereby Earth, and the universe as a whole, turned back and reflected on itself (Swimme & Berry, 1992, p. 143)."

The focus of this paper is to identify the physiological and psychospiritual evolutionary factors that have led to the present day existence of the human species as a means to better inform a future intention of living harmoniously within the Earth. Altogether, tens of billions of humans over hundreds of thousands of years have brought forth the culture of humans today. This broader understanding of the roots of modern living is critical for all human beings, especially environmentalists. In a dispirit search for reasons behind environmental injustices, environmentalists are too often knotted to a narrow outlook, blaming the powers that be. This can create separation and condescension as they relate to alleged violators of written and unwritten environmental law. In *The Art of War* (The Denma Translation Group, 2001), the legendary work of Chinese military leader Sun Tzu, it is said that one must "take whole" before entering battle. In environmental work, the same is true. Environmentalists must not only take

ownership of the modern culture they live in, but also of all evolutionary truths that reside in their body, mind, and spirit.

### The Birth of Human Consciousness

Human beings experience existence in a way distinct from all other species known – they are self-aware or conscious. This research paper is simple proof of that. It requires deep reflection and complex composition far beyond the capabilities of even the most intelligent animal. As humans reflect on their own nature, an anthropocentric temptation might be to render consciousness as emerging out of the humans; however, this paper is rooted in the fundamental assumption that universal consciousness found the appropriate conditions to spring forth in the human. Consciousness is beautifully described in the work of Terence McKenna (1991, p. 143):

Consciousness has been called "awareness of awareness" and is characterized by novel connections among the various data of experience. Consciousness is like a super nonspecific immune response. There is no evolutionary limit to how much consciousness can be acquired by a species. And there is no end to the degree of adaptive advantage the acquisition of consciousness will confer upon the individual or the species in which it resides.

The human physical body and cognitive skills are an expression of this consciousness under the specific conditions of the earth's environment. In fact, it helps to view each as part of a comprehensive and integrated system. Furthermore, all of this development must be seen as part of the all-encompassing, uninterrupted evolution of the universe. In order to provide a comprehensive understanding of human consciousness, several fields of study must be explored – evolutionary biology, paleontology, and anthropology, as well as psychology, philosophy, cosmology, and spirituality.

## The Body and Mind of Homo Species

There is a general consensus among evolutionary biologists that modern humans have evolved from primates comparable to modern day chimpanzees and bonobos; however, the exact line of ancestral species is still disputed. There are several homo species that existed over the last few million years and researchers are unsure which hold direct genetic ties to humans today. For the purposes of this paper, it is not as important to know the specific dates and transitions of the human species but rather to understand the critical themes of physiological and psychological changes that happened over a long period of time. By exploring these evolutionary tendencies of the human species, a deeper understanding for the modern human can be found.

Over this time of evolution, the homo species experienced a wide range of physical transformations indicated by Swimme & Berry (1992, p. 145):

The most elemental physical transformations leading to human identity can be indicated as increase in brain size, upright posture, bipedal walking, frontal focus of eyes and countenance, development of the arm and hand in relation to the eye, increased capacity of the hands for grasping, and incidental use of nature-shaped stones as implements.

This represents a dramatic transition from strictly forest dwellers to inhabitants of nearly every region of the planet. As with any evolutionary change, these physical transformations were a direct response to the feedback each species was receiving from their environment. Ultimately, each change allowed the species better access to food and more protection from potential predators. They also were influenced by and precisely supported the psychological changes listed below.

The homo species also developed more complex cognitive skills that deepened self-awareness. The work of Neisser (1988), further examined by Leary & Buttermore (2003),

identified five possible domains of self-knowledge – ecological self, recognizing of the position and movement of the body in the immediate physical environment; interpersonal self, processing of raw and unreflective interactions with other members of its species; extended self, thinking about oneself in the past and future; private self, holding intentional internal processing of thoughts, feelings, and other states; and conceptual self, constructing abstract identities and representations of oneself. According to Leary & Buttermore (2003), it was only homo sapiens during the Middle-Upper Paleolithic transition (c. 40,000-60,000 years ago) that began to possess conceptual self-knowledge. This was evident in the appearance of ritualistic burial practices, painting, music, and other symbolic activity. During this time, there was an explosion of technology and culture unmatched by any other time period. It was as if the human species had found the key that unlocked the door to accelerated evolutionary development. Leary & Buttermore (2003, p. 387) describe this monumental unfolding:

For the first time, human beings possessed a modern ability to think about themselves in abstract and symbolic ways. Combined with the extended-self ability that allowed them to project themselves into the future, this new ability allowed people to imagine themselves in the future in symbolic and abstract ways, a trait needed for intentional innovation, symbolic culture, and efforts at self-improvement.

The combination of physical adaptions and cognitive enhancements led to a few early innovations that included the development of stone tools, the control of fire, and social organization such as cooperative hunting (Leary & Buttermore, 2003). These advances may seem futile when compared to the technology and civilization of today, but it is important to understand that the homo species were discovering a new way of relating to their environment. First, through the creation of tools and fire, homo species were realizing the raw materials and

untapped energy present in their environment and how to manipulate them in such a way to provide even greater resources of food and security. Second, through social organization, the home species were realizing that the only way to insure their survival in a dangerous environment was to work together. Of course, these abilities existed in many species prior to homo, but it is the complexity of these abilities in humans that is so important. These simple advances started the human on the path from a species "so frail, so unimpressive, a creature hardly worth the attention of the other animals in the forest (Swimme & Berry, 1992, p. 143)," to one capable of single-handedly causing the extinctions of many species across the earth.

## The Birth of Death Awareness

In terms of evolution, the arrival of the modern human happened virtually overnight. In a relatively short time, the homo species developed the awesome conceptual identity of being alive. A multidimensional "I" now existed that was held in contrast to the "other" such as tribe members, animals, earth, and the cosmos. The humans entered into the world of subjectivity. The concept of self was most likely not as extensive as the one constructed and supported by modern day culture, but even a sliver of separation from the world around them must have had a tremendous influence on the thoughts and actions of homo sapiens. Perhaps the most shattering realization, and the focus of this section, is that with the birth of human consciousness came the birth of human impermanence, uncertainty, and wonder. Humans were now conceptually aware of death and actively looking to find meaning in it.

What are the roots of death awareness? Swimme and Berry (1992, p. 147) suggest that moving from gatherers to hunters and gatherers two million years ago was a significant event in human evolution:

A new sense of self-identity occurred along a with a sense of having power of life and death over other forms of life much closer to themselves...to kill required something more than the physical vigor and cunning associated with the stalking process: it required a psychic permission granted by the cosmological order itself.

There is no archeological evidence to suggest that homo habilis had any abstract interpretation of death for their species or others but, this change in diet certainly signified a change in their relationship to the world. They no longer only saw other animals as predators, but also as a source of food which could only be consumed through killing. Another foundation of death awareness might be found even earlier (c. 3.2 million years ago) in how australopithecus afarensis cared for the dead. In an interview with Paul Pettitt, an archaeologist at the University of Sheffield, UK who studies the origins of human burial, Lawton (2012) looks at the significance of 13 bodies that were found together on a hillside. There were no signs of a flash flood or any other catastrophe; the bodies appear to have been placed there by the living. Pettitt calls this structured abandonment and states that:

It was probably just the need to get rid of a rotting corpse, it could be recognition that the appropriate place for the corpses is not among the living – a first formal division between the living and the dead . . . once you've reached that point you're on the road to symbolic activity.

It is not until much later in evolution, during the time of Neanderthals and early homo sapiens, that more symbolic mortuary practices were established, and not until 14,000 years ago that humans were buried in cemeteries comparable to present day sites (Lawton, 2012).

To understand the impact of these events, it is helpful to bring in the work of Forrest (2012, p. 864) who speaks about meaning as a continuum:

Humans were intentional beings before they became conscious ones, so we can refine our earlier understanding of meaning by viewing it as a continuum, with simple intentionality on the lower, or evolutionarily earlier, end, semantic or symbolic (representative) meaning on the ascent toward the higher, or evolutionarily more recent, end, and existential meaning on the highest, or most recent, end.

She also posits that if life emerged from nonlife then it can be inferred that meaning arose from nonmeaning. Therefore, as human ancestors began to find more meaning and symbolism in living, through art, music, and ceremony, they consequently found more meaning in death through burial practices and ceremonies. Even if the awareness of death did not take center stage, it was now unavoidably present in their conceptual experience of life. Simply put, humans had no choice but to explore what the meaning of death was. Humans were becoming quickly aware of the primordial laws of the universe such as creation and destruction that they were unconsciously confined to before. How could this newfound awareness of death impact human existence? It likely resulted in the same impact that remains in humans today – an entrenched fear of death and a profound inquiry into afterlife.

To explore the fear of death, it is helpful to introduce the research on terror management theory (Pyszczynski, Greenberg, & Solomon, 1997, p. 2) which states that:

Although humans share with other forms of life a basic instinct of self-preservation, they are unique in their possession of intellectual capacities that make them explicitly and painfully aware of the inevitability of their immortality. Because of this juxtaposition of animal instinct with sophisticated intellect, humans must live with the knowledge that the most basic of their needs and desires ultimately will be thwarted. Knowledge of the

inevitability of death gives rise to the potential for paralyzing terror, which would make continued goal-directed behavior impossible.

Terror management theory (TMT) proposes that the most innate desire of living beings is to simply live, and that human beings have the unique awareness of the fact that this desire will eventually be unfulfilled. It could be argued that the realization of this truth was even more intense during the time of early humans than modern day culture because they were more intimately connected to their basic needs. The superficial material needs of modern society serve to conceal the everyday experience of this fundamental reality. TMT asserts that this terror is suppressed by individuals and groups creating a worldview that defines their place in it with certain standards to be met to ensure literal and/or symbolic immortality and a level of satisfaction for meeting these standards. Therefore, the fear of death could have prompted early humans to create various rituals and develop more complex cultural practices, the roots of religion and spirituality. The most important part of this is that with freedom of conscious choice, humans were literally empowered to create their own world of meaning; however, still existing in small bands of hunters and gatherers, there was likely a low ceiling to level of meaning and cultural complexity of the first humans. Human consciousness was born nonetheless, and there was no way of shutting it out.

## The Evolution of Human Consciousness

As consciousness began to unfold within human beings, the degree of separation between them and other nonhumans began to expand. Swimme and Berry (1992, p. 158) explain that:

Whereas the nonhuman life forms receive their guidance almost completely through their genetic coding, the human is genetically coded toward further transgenetic cultural

coding, which in their specific forms are invented by human communities themselves in the various modes of expression.

This means that the gift of consciousness and reason came with a price – humans would need to learn through experience, rather than possess innate knowledge. This coupled with that fact that they were physically unimpressive put a tremendous pressure on the development of cognitive skills and social collaborations to transform the earth resources into technology that would give them competitive advantages for survival. With extended memory and increased foresight, and the ability to deeply reflect on this cognitive data, humans now had another advantage over nonhumans in predicting the future. One of the most important evolutionary developments was complex language. Wagner (2009, pp. 311-312) notes:

Language not only allowed humans to exchange social information but it also served as a successor to physical grooming in facilitating harmonious social relations in ever-larger social groups. Unlike the grooming activities of other primates, language can be used for prosocial interactions with several individuals at once and can be combined with other activities such as walking, nursing, and food preparation or gathering.

Swimme and Berry (1992) explain three causes that shape evolution: genetic mutation, natural selection, and niche creation, relating to chance, necessity, and conscious choice respectively. In the case of the evolution of human consciousness over the last 100,000 years, conscious choice is by far the most influential. Swimme and Berry go on to say that each of the three causes is biological illustrations of the Cosmogentic Principle: differentiation, interrelatedness, and autopoiesis. In this analogy, conscious choice is linked to autopoiesis, referring to the self-making nature of the universe. This is appropriately connected to freedom of

human evolution because they were no longer confined to having innate and instant responses to their environment.

It is important to note what the evolution of human consciousness meant on a cosmological scale. It can be seen as a new expansion of universal complexity. It was a new way for the universe to express and witness itself. It also increased the degree of dualism in the universe because before the monumental change occurred, there was the nothing to compare the preceding existence with. Consequently, when a new existence is born, what it emerged from is also born as something separate. For example, with the birth of life, came the birth of nonlife. With the birth of consciousness, came the birth of unconsciousness. Much later in human development, the birth of sustainability is coupled with the birth of unsustainability. The evolution of human consciousness also marks the beginning of the universe in conflict with itself. Since humans possessed reason which could trump innate action, they could consciously choose whatever they wanted even if it was not aligned with a universal purpose of supporting life. The first example of this is the extinctions of megafauna caused by more innovative hunting methods of humans. Zalasiewicz, Williams, Haywood, and Ellis (2011, p. 836) note:

The influence of humans is felt more strongly towards the end of the Pleistocene epoch, with the demise of much of the 'megafauna' that included the saber-toothed cats in North America or the woolly mammoths of Siberia. On many continents, the disappearance of the megafauna appears to coincide with the arrival of modern humans.

It is also important to consider any alternative theories of the evolution of human consciousness because as history has proven, sometimes the most radical philosophies end up to be the wisdom of the future. The most extreme theory to consider is McKenna's (1991) mushroom and evolution theory. The theory involves the early homo species and the departure

from their forest dweller existence. McKenna suggests that it was the consumption of psychedelic mushrooms in the savannas at the base of the forests that led the human species into the age of consciousness. He states that at a low dosage, vision was heightened for protection against predators; at a medium dosage, libido was increased to ensure more offspring; and at a high dosage, the mind expanded to new degrees of consciousness. Although largely disputed, this theory points to the great unknowns still present in the evolutionary history of humans.

The following section will examine the last 12,000 years of the evolution of human consciousness up to the present day. By this time, the human species have spanned the globe and have developed language, art, music, shelter, and an assortment of tools; however, they still existed in roughly the same manner as their ancestors.

## The Birth of Domestication

The birth of domestication of plants and animals roughly coincided with the beginning of the Holocene geological epoch approximately 11,500 years ago (Steffen et al., 2011). This marked a dramatic change in the lifestyle of homo sapiens. Considering up to the present day, homo sapiens have been agriculturalists for only approximately 7% of their 160,000-year existence (Steffen et al., 2011). Human beings were now, for the first time in their history, moving from nomadic to more sedentary living. Hunting became more difficult because the game fled any settlement areas. Some tribes continued with hunting and gathering which marks the first significant split in the history of human culture. It is important to note that, although severely threatened by modern culture, some of these tribes still exist today.

Bands, each of a few dozen members, began to come together to form small villages and eventually formed cities spanning large regions. Steffen, Grinevald, Crutzen, and McNeil (2011, p. 845) reflect on the geochemical changes influence by agriculture:

We see a surprising speed in the growth of mankind's geochemical work. We see a more and more pronounced influence of consciousness and collective human reason upon geochemical processes. Man has introduced into the planet's structure a new form of effect upon the exchange of atoms between living matter and inert matter. Formerly, organisms affected the history only of those atoms that were necessary for their respiration, nutrition and proliferation. Man has widened this circle, exerting influence upon elements necessary for technology and for the creation of civilized forms of life.

However, during the early stages of domestication, the impact of humans on the environment was relatively minimal compared to today. Land clearing for crops and water redirection for irrigation was constrained by rudimentary technology and the amount of available energy available, namely humans and animals (Steffen et al., 2011).

Domestication also created the beginnings of a complex paradox that still exists to this day. It can be explained by two simple quotes from Swimme (1990): since small villages now carried a surplus of goods and materials "warfare became biologically intelligent" and with larger communities more "people were forced to get along with one another." Previously, humans held their allegiance to very small band of people and only possessed what they could easily carry with them as they moved from region to region. As Swimme (1990) points out, conflict would either need to be resolved for the sake of survival or the member of the band would be asked to leave and almost surely die without the group. With domestication and settlement, humans now became predators of one another in order to secure the new resources available. The following section will explore the costly impact of this strategy on civilizations around the world.

On the cosmic scale, Swimme (1990) sees domestication as a colossal effort of "humans taming a wild universe." He goes on to say that in domestication, humans made a commitment to dominance not over the land, but themselves. This is a critical point because it expands the significance of taming an animal. In taming a dog, the human species were taming themselves. It could be debated that these early acts of dominance over the land and animals set the stage for dominance of humans over other humans and the creation of complex societal laws and norms. If the seeds of a human-dominated world were the first tools and control of fire, then domestication was the first sprouts of those seeds. Human beings could now see on a much grander scale, through the reflection of the land, how their actions could transform the world around them. This relationship to the world was later translated into religious communication as well, as can be seen in the Bible proclaiming human beings dominion over the earth.

# **Empires, Enlightenment, and the Machine**

The last 5,000 years of human existence have been exponentially more eventful in terms of cultural development and humans' impact on the earth than the entire preceding history of the human species. In a paper of this size, it is difficult to explore even a fraction of the significant events that have happened during this time. Instead, the focus of this section is to identify the high level developments in human consciousness through how humans related to each other and how they related to the earth. The three areas of interest are the rise of empires, the era of enlightenment, and the industrial revolution.

Humans moved into the classical period when they found the most fertile, "erotic spots" of the earth and began to established large scale city establishments (Swimme, 1990). The four beginning locations of civilization were in Mesopotamia and along the Nile River, Indus River, and Yellow River. Zalasiewicz et al. (2011, p. 836) report that "urban cultures spread across the

tropical and temperate zones everywhere, with those in Europe, Central and South America and China being diverse and advanced by the first millennium BC." The people that settled there came from different tribes and lineages. There were competition and tension for location and access to resources around the river. The early, ideally-located cities actually experienced resource growth faster than population growth (Swimme, 1990). With this newfound abundance, came trade, desire, greed, and especially chronic warfare which necessitated an aggressive and protective military class with competent leaders. As societies grew, there was a new need for social order through laws and regulations. Those coming in late to the settlements were taken into the resource-filled households as servants/slaves. From these conditions, kingship sprung. Swimme (1990) suggests that with birth of kings came the first real "individuals". Kings were also given the divine power of the heaven gods. At the same time, women with their connection to earth spirit, lost power in all parts of society which they have only started to regain recently after several thousand years. Swimme (1990) describes the state as "a novel power in the universe."

What did the birth of empires mean for human consciousness? It created a new degree of separation amongst various humans that established the conditions for a deeply rooted cast system that still continues to the present day. A divide that only existed between humans and nature, now extended within the human species through enslavement and subservience. Some researchers may claim that a similar practice exists throughout the animal kingdom known as dominance hierarchy where a ranking system among an animal group is established. If human beings evolved from animal species, were they not just carrying out some innate tendency for social order? The position of this paper is that there is a fundamental difference between human enslavement and animal dominance. In the case of slavery, humans were literally stripping away

the identity of others. This took the power of abstract thought to new level. Humans were able to lie to themselves about the essential qualities of another human. In doing so, they simultaneously rejected their animalistic roots, in disgracing hunters and gatherers, and prevented their potential for greater wisdom as humans. Wagner (2009, p. 315) writes:

With the rise of systematic inequality, the privileged classes not only monopolized the real sources of material well-being but also promoted a redefinition of value in which things were held to be desirable in proportion to their scarcity—that is, their unavailability to the masses. The Inca elites, it is said, dined on hummingbird tongues, a commodity whose value rested largely on its social cost and general unavailability, and hence its signification of power. One might say that the definition of value thus shifted from the genuine and shared to the spurious, superfluous, and invidious—a burdensome notion of value under which we continue to labor.

With a deeply ingrained social structure of ruler and ruled, human civilization was on path of building, acquisition, consumption, and security. They had less focus on what the land naturally provided and more on what they could do to manipulate it. Humans began to transform all kinds of raw resources into material goods, energy, and incredible structures. More waterways were diverted and more land was cleared for large scale agriculture. "The first significant human use of fossil fuels - coal - arose during the Song dynasty (960–1279) in China (Steffen et al., 2011, p. 846)." This set the stage for the industrial period; however one final step was needed first – the scientific revolution or the Age of Enlightenment.

In paraphrasing the work of E. A. Burtt, Berman (1981, p. 51) states that "the seventeenth century, which began with the search for God in the universe, ended by squeezing Him out of it altogether." The age of reason marked the assertion of empirical data as supreme truth. It was the

birth of the scientific method and systematic inquiry. It firmly established a subject/object split which had its roots so long ago at the birth of human consciousness and conceptual thinking. This was the beginning of the final stage of cutting the human species from communion with nature and spirit. Human beings now had full permission to do as they please with the separate, inanimate earth.

The most significant innovation to come out of this new worldview was the modern machine. The machine greatly changed agriculture, manufacturing, mining, transportation, and virtually every other facet of society. It was a sign of moving from animal and human energy to machine energy. This would in time have the same effect on humans that the domestication of plants and animals did, the humans made machines of their selves. They became a slave to what machines were made for – production. This significantly accelerated pace of growth and destruction at the same time.

## Deep into the Anthropocene Era

In the 21<sup>st</sup> century, humans have virtually conquered the entire earth and have now affected the functioning of it on a grand scale. Steffen et al. (2011, p. 843) describe the Anthropocene Era:

The term Anthropocene suggests: (i) that the Earth is now moving out of its current geological epoch, called the Holocene and (ii) that human activity is largely responsible for this exit from the Holocene, that is, that humankind has become a global geological force in its own right.

The effect of the human species on the earth's environment has been occurring for quite some time. In fact, some researchers argue that the beginning of the Anthropocene should coincide with the birth of agriculture because data reveals that humans influence the atmospheric CO<sup>2</sup>

levels at that time (Steffen et al., 2011). Most scientists however, identify some time during the Industrial Revolution as the start of the Anthropocene. The most dramatic change in the human to earth relationship has happened post-World War II into the 21<sup>st</sup> century and is known as the Great Acceleration (Steffen et al., 2011). Steffen et al. present a series of graphs that show an exponential, and some cases near vertical, increase in causes and conditions during this time period. The list of causes includes population, total real GDP, foreign direct investment, damming of rivers, water use, fertilizer consumption, urban population, paper consumption, motor vehicles, telecommunications, and international tourism. The list of conditions includes CO<sup>2</sup> and N<sup>2</sup>O atmospheric concentrations, ozone depletion, great floods, exploited ocean ecosystems, species extinctions, and loss of tropical rain forest. These devastating impacts to environment can largely be accounted for by the development that took place in the United States and Western Europe; however, the second wave of acceleration in the 21<sup>st</sup> century is being decided by the rising powers of the world like China, India, and Brazil.

What does the Anthropocene Epoch mean for the evolution of human consciousness? First and foremost, it further confirms the split between the human species and the rest of the earth it is a part of. This is especially true in western culture's age of materialism. The split has been drastically widened by an explosion of material goods. For example, Beinhocker (2007) estimates that the number of SKUs, stock keeping units, in New York City is in the tens of billions. Comparing this to the small hunter and gatherer tribe of Yanomamo, with only a few hundred products, is rather incomprehensible. Adding the lighting pace of society to this complexity, clearly demonstrates why the modern human is lost and, at the same time, enslaved to cultural pressures of today.

In conquering the world through globalization, humans have also gathered the intellect and technology of every culture. This has meant tremendous discoveries in the field of science, the cornerstone of the Industrial and Technology Revolutions. The theme of these discoveries, however, has rattled the fundamental qualities of the scientific worldview over the past few centuries. Nearly every aspect of science, from physics to climatology, points to the interdependence nature of earth and universe, and consequently the human species. This seemingly unlikely result of such dominance and destruction might be the beginning of a brighter future. The reason is that although the human species have the unique ability of abstract thought, which can create convenient, short-term ideas of their relationship to the earth, they are still structurally-coupled to the environment. As with the first conceptual knowledge of death with early homo sapiens, modern humans have no choice but to process the feedback of their environment. As environmental conditions get increasingly worse, they will be unable to continue to deny the impacts of their existence on the land, water, and air. The question is whether the human species will be able to learn from this feedback in time to avoid catastrophic events.

### **Future of Human Consciousness**

In every period of history, humans have believed they were at the most pivotal time in human existence. They thought and felt this because it was true, and this will continue to true into the future. With the gift of conscious choice, every moment in the course of human evolution is of the greatest importance and at the pinnacle of the human consciousness experiment conducted within the universe. Humans assign meaning to their experience and conception of the past, present, and future, and proceed with the actions they deem appropriate. Therefore, for any shift to take place in planetary stewardship, the human species must have a

shift in the consciousness that drives their existence. To have a different outlook for the future, the view of the past and present must shift. The human species must collectively come to honest and heart-felt terms with the impact they have had on the world. In deep reflection, learning and healing are possible. Every time a new species is threatened, a new ecosystem polluted, or a new social movement is made, an opportunity to heal the past, change the present, and re-envision the future is brought to the forefront of human consciousness. The defining moments of the human species are the responses they have to these environmental and social cues. Joanna Macy (2012) speaks of three responses or realities happening simultaneously in the human consciousness: "Business as Usual", the view that little change is needed in human culture; the "Great Unraveling", the view that the future will be catastrophic and change is not possible; and the "Great Turning", the view that change is needed in the world and is possible.

For the "Great Turning" to become a realty in more human beings, Kamp (2013, p. 40) says that "self direction is the new definition of freedom. People will be more and more involved in the designing of their own lives." To do so, various people of the world must be freed from dominance and empowered to create their future. This requires the deep understanding and mending of the split in conceptual identity that happened in the human species at the birth of consciousness. Kamp suggests that this points to spiritual development over material development. Perhaps in this transformation of society, humans will discover that there is a greater need to get out of the way of earth rather than try to fix it. Tickell (2008, p. 225) shares, founder of Gaia Theory, James Lovelock's remarks that "humans are about as qualified to be stewards of the Earth as goats are to be gardeners."

### Conclusion

It can be helpful to consider birth, evolution, and future of human consciousness as a lifespan. With the birth of consciousness came innocence and wonder. The human species

entered a new world of existence. Over time, humans developed skills and knowledge that enabled them to get the things they wanted – initially food and safety. As they received more from the world, their appetite for power, and consequently their drive for innovation, increased. Their speed of evolution left many spots unseen or unconsidered which have had great consequences on themselves and the world around them. Perhaps, in the 21<sup>st</sup> century, they are now at the age of a teenager, full of self-proclaimed power and viewing the world through self-centered eyes. They are still growing and with that, come growing pains. As with any life, the future still holds an endless field of possibility, of which includes a world where human species have used the gift of consciousness to benefit the earth and the entire universe. A.J. Muste, a nonviolent social activist, once said, "There is no way to peace, peace is the way." Perhaps this quote could also be applied as, "There is no way to consciousness, consciousness is the way."

### References

- Beinhocker, E. D. (2007). *The Origin of wealth: Evolution, complexity, and the radical remaking of Economics*. Boston: Harvard Business Review Press.
- Berman, B. (1981). The Reenchantment of the world. New York: Cornell University Press.
- Busch, C. (Director). (October 1, 1990). Canticle to the cosmos: The Classic course on the story of the universe, earth, life, and human. United States: Center for the Story of the Universe.
- The Denma Translation Group (2001). The Art of war. Boston: Shambhala Publications.
- Forrest, B. (2000). The Possibility of meaning in human evolution. *Zygon: Journal Of Religion & Science*, 35(4), 861.
- Kamp, J. (2013). The Revenge of the spirit. The Intelligent Optimist, 11(1), 36-40.
- Lawton, G. G. (2012). Death: The Evolution of funerals. New Scientist, 216(2887), 32-36.
- Leary, M. R., & Buttermore, N. R. (2003). The Evolution of the human self: Tracing the natural history of self-awareness. *Journal For The Theory Of Social Behaviour*, *33*(4), 365-404. doi:10.1046/j.1468-5914.2003.00223.x
- Macy, J. & Johnstone, C. (2012). *Active hope: How to face the mess we're in without going crazy*. Novato, California: New World Library.
- McKenna, T. (1991). The Archaic revival: Speculations on psychedelic mushrooms, the Amazon, virtual reality, UFOs, evolution, shamanism, the rebirth of the goddess, and the end of history. New York: Harper Collins.
- Pyszczynski, T., Greenberg, J., & Solomon, S. (1997). Why do we need what we need? A Terror management perspective on the roots of human social motivation. *Psychological Inquiry*, 8(1), 1-20.

- Steffen, W., Persson, Å., Deutsch, L., Zalasiewicz, J., Williams, M., Richardson, K., & ...

  Svedin, U. (2011). The Anthropocene: From Global change to planetary stewardship.

  AMBIO A Journal Of The Human Environment, 40(7), 739-761. doi:10.1007/s13280-011-0185-x
- Steffen, W., Grinevald, J., Crutzen, P., & McNeil, J. (2011). The Anthropocene: Conceptual and historical perspectives. *Philosophical Transactions Of The Royal Society A: Mathematical, Physical & Engineering Sciences, 369(1938),* 842-867.
- Swimme, B. & Berry, T. (1992). *The Universe story: From the Primordial flaring forth to the ecozoic era*. New York: HarperCollins Publishers.
- Tickell, C. (2008). Gaia and the human species. In Schnieder, S. H., Miller, J. R., Crist, E., & Boston, P. J. (Eds.), *Scientists debate gaia* (pp. 223-227). Massachusetts: MIT Press.
- Wagner, J. (2009). Coming home: The Evolutionary roots of utopia. *Utopian Studies*, 20(2), 299-320.
- Zalasiewicz, J., Williams, M., Haywood, A., & Ellis, M., (2011). The Anthropocene: a new epoch of geological time?. *Philosophical Transactions Of The Royal Society A: Mathematical, Physical & Engineering Sciences, 369(1938),* 835-841.